

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-15. (Cancelled).

16. (Currently Amended) A bypass conduit for use in a wall of a heart,
comprising:

a hollow conduit having an interior and an exterior and adapted to be positioned in the heart wall between ~~[[the]]~~ a coronary vessel ~~artery~~ and a chamber in the heart, wherein the conduit has an attachment mechanism on at least one end adapted to anchor the conduit in place.

17. (Previously Presented) The device of claim 16, wherein the conduit is expanded using an inflatable balloon.

18. (Previously Presented) The device of claim 16, wherein the chamber is the left ventricle.

19. (Previously Presented) The device of claim 16, wherein the attachment mechanism is selected from the group consisting of hooks, barbs, flanges, collars, suture holes, and expandable legs.

20. (Previously Presented) The device of claim 16, wherein the attachment mechanism is adapted to anchor the conduit in the heart wall.

21. (Currently Amended) The device of claim 16, wherein the attachment mechanism is adapted to anchor the conduit in the coronary vessel ~~artery~~.

22. (Currently Amended) A bypass conduit for use in a wall of a heart, comprising:

a hollow conduit having a plurality of circular rings, an interior, and an exterior and adapted to be positioned in the heart wall between ~~[[the]]~~ a coronary vessel ~~artery~~ and a chamber in the heart, wherein the conduit has an attachment mechanism on at least one end adapted to anchor the conduit in place.

23. (Previously Presented) A conduit for placing a coronary vessel of a patient's heart in communication with a heart chamber, the conduit comprising:

a tubular element including first and second portions having different cross-sectional sizes, the tubular element having a bore defining a blood flow path;

wherein the cross-section of the first portion of the tubular element is larger than the cross-section of the second portion of the tubular element such that the tubular element is generally funnel-shaped; and

wherein the first and second portions of the tubular element are generally aligned and the bore defines a generally straight blood flow path.

24. (Previously Presented) A conduit for placing a coronary vessel of a patient's heart in communication with a heart chamber, the conduit comprising:

a tubular element configured to positioned in the wall of a patient's heart, the tubular element including first and second ends and a bore defining a blood flow path;
and

a vessel supporting mechanism carried by the tubular element, the vessel supporting mechanism being positioned on the conduit so as to contact and support the wall of a coronary vessel when the conduit is positioned in the heart wall.

25. (Previously Presented) The conduit of claim 24, wherein the tubular element is a rigid, solid walled structure.

26-30. (Cancelled).

31. (New) The device of claim 16, wherein the coronary vessel is a coronary artery.

32. (New) The device of claim 16, wherein the conduit is sufficiently rigid such that a pathway between the coronary vessel and the chamber defined by the conduit remains open during both systole and diastole.

33. (New) The device of claim 16, wherein the conduit includes a plurality of rings.

34. (New) The device of claim 16, wherein the conduit includes a membrane.
35. (New) The device of claim 34, wherein the conduit includes a plurality of rings and the membrane surrounds the plurality of rings.
36. (New) The device of claim 16, wherein the conduit defines a lumen and the conduit is configured to prevent the lumen from collapsing by reason of contraction of the wall surrounding the conduit.
37. (New) The device of claim 16, wherein the conduit defines a channel that includes an angled or curved portion.
38. (New) The device of claim 16, wherein the conduit is configured to expand and contract.
39. (New) The device of claim 16, wherein the attachment mechanism is configured to contact an inner surface of the chamber.
40. (New) The bypass conduit of claim 22, wherein the coronary vessel is a coronary artery.

41. (New) The bypass conduit of claim 22, wherein the chamber is a left ventricle.

42. (New) The bypass conduit of claim 22, wherein the conduit is sufficiently rigid such that a pathway between the coronary vessel and the chamber defined by the conduit remains open during both systole and diastole.

43. (New) The bypass conduit of claim 22, wherein the conduit includes a membrane.

44. (New) The bypass conduit of claim 43, wherein the membrane surrounds the plurality of circular rings.

45. (New) The bypass conduit of claim 22, wherein the conduit defines a lumen and the conduit is configured to prevent the lumen from collapsing by reason of contraction of the wall surrounding the conduit.

46. (New) The bypass conduit of claim 22, wherein the conduit defines a channel that includes an angled or curved portion.

47. (New) The bypass conduit of claim 22, wherein the conduit is configured to expand and contract.

48. (New) The bypass conduit of claim 22, wherein the attachment mechanism is configured to contact an inner surface of the chamber.

49. (New) The bypass conduit of claim 22, wherein the attachment mechanism is selected from the group consisting of hooks, barbs, flanges, collars, suture holes, and expandable legs.

50. (New) The bypass conduit of claim 22, wherein the attachment mechanism is adapted to anchor the conduit in the heart wall.

51. (New) The conduit of claim 24, wherein the coronary vessel is a coronary artery.

52. (New) The conduit of claim 24, wherein the conduit is sufficiently rigid such that the blood flow path remains open during both systole and diastole.

53. (New) The conduit of claim 24, wherein the conduit includes a plurality of rings.

54. (New) The conduit of claim 24, wherein the conduit includes a membrane.

55. (New) The conduit of claim 54, wherein the conduit includes a plurality of rings and the membrane surrounds the plurality of rings.

56. (New) The conduit of claim 24, wherein the conduit is configured to prevent the blood flow path from collapsing by reason of contraction of the wall surrounding the conduit.

57. (New) The conduit of claim 24, wherein the conduit is configured to expand and contract.

58. (New) The conduit of claim 24, further comprising an attachment mechanism on at least one end adapted to anchor the conduit in place.

59. (New) The conduit of claim 58, wherein the attachment mechanism is configured to contact an inner surface of the chamber.

60. (New) The conduit of claim 58, wherein the attachment mechanism is selected from the group consisting of hooks, barbs, flanges, collars, suture holes, and expandable legs.

61. (New) The conduit of claim 58, wherein the attachment mechanism is adapted to anchor the conduit in the heart wall.

62. (New) The conduit of claim 24, wherein the vessel supporting mechanism is substantially axially aligned with the coronary vessel.

63. (New) The conduit of claim 24, wherein the vessel supporting mechanism extends substantially perpendicularly to the tubular element.

64. (New) The conduit of claim 24, wherein the vessel supporting mechanism is configured to be in blood flow communication with the coronary vessel.